

REMARKS

Claims 1-22 are pending. Claims 1, 4, and 13 have been amended. No new matter has been introduced. Reexamination and reconsideration of the present application are respectfully requested.

In the July 18, 2006 Office Action, the Examiner rejected claims 1, 2, 4, 5, 11, 12, 14, 15, 17, 18, 20, and 21 under 35 U.S.C. § 103 (a) as being unpatentable over Wynn, U.S. Patent No. 6,629,137 (hereinafter Wynn) in view of Riley et al., U.S. Patent No. 5,293,488 (hereinafter Riley). (*July 18 Office Action, pages 2*) The Examiner rejected claims 3, 6-10, 13, 16, 19, and 22 under 35 U.S.C. § 103 (a) as being unpatentable over Wynn in view of Riley and further in view of George Abe, "Residential Broadband, Second Edition", Cisco Press, December 23, 1999. (hereinafter Abe). (*July 18 Office Action, pages 7*) Applicants respectfully traverse the rejections.

**Independent claim 1, as amended now recites:**

A device connectable to an external network for use in directing data, comprising:  
***a single external network interface provided for interfacing with the external network, and allocated with a plurality of physical addresses*** registered for physically discriminating from other devices; and

***a processor that executes a receiving process and a transmitting process of data through the single external network interface***, wherein

the receiving process includes:

receiving data having a physical address indicating a destination of the data;

comparing the physical address of the received data with the registered physical addresses;

completing the receiving process when the physical address of the received data matches with one of the plurality of registered physical addresses; and otherwise

canceling the receiving process when the physical address of the received data matches with none of the plurality of registered physical addresses, and

the transmitting process includes:

detecting a destination of data to be transmitted;

selecting one of the plurality of registered physical addresses according to the detected destination of the data to be transmitted; and

attaching the selected physical address to the data, thereby indicating an origin of the data.

The Wynn reference does not disclose, teach or suggest the device specified in independent claim 1, as amended. As the Examiner has acknowledged, Wynn does not teach ***“a single external network interface provided for interfacing with the external network, and allocated with a plurality of physical addresses*** registered for physically discriminating from other devices” or ***“a processor that executes a receiving process and a transmitting process of data through the single external network interface.”***

The Riley reference does not make up for the deficiencies of Wynn. Riley is directed to a message routing apparatus. *(Riley; Abstract)* Riley discloses a router comprising a plurality of network interface units 20A to 20N operative to transmit and/or receive messages over respective communication networks A to N. *(Riley; Col. 5, lines 45-50)* Each network interface unit 20A to 20N includes low level interface hardware 23 and local routing manager 21A to 21N which are interconnected in a loop configuration using a plurality of unidirectional point to point links. *(Riley; Col. 6, lines 9-25)* The purpose of the low level interface hardware 23 is to provide the low level interface functions to the corresponding network such as media access control (MAC) functions and the physical layer signal conditioning. *(Riley; Col. 6, lines 9-25)* However, Riley fails to teach that the low level interface hardware 23 includes a *plurality* of physical addresses. Therefore, the combination of Wynn and Riley does not disclose, teach, or suggest ***“a single external network interface provided for interfacing with the external network, and allocated with a plurality of physical addresses*** registered for physically discriminating from other devices.”

In addition, Riley fails to disclose, teach, or suggest “a processor that executes a

receiving process and a transmitting process of data *through the single external network interface.*” In fact, Riley teaches away from the device specified in independent claim 1. In particular, Riley discloses a local routing manager with an input means for receiving messages to be routed and a pair of outputs through which messages are transmitted. This is distinct from a processor which executing a receiving process and a transmitting process through the single external network interface. Accordingly, independent claim 1 distinguishes over Wynn in combination with Riley.

Claims 4, 7, and 11-22 recite limitations similar to those in independent claim 1. Accordingly, Applicants respectfully submit that claims 4, 7, and 11-22 distinguish over Wynn in combination with Riley for reasons similar to those set forth above with respect to claim 1.

Claims 2-3, 5-6 and 8-10 depend from claims 1, 4, and 7, respectively. Accordingly, Applicants respectfully submit that claims 2-3, 5-6 and 8-10 distinguish over Wynn in combination with Riley for the same reasons set forth above with respect to claims 1, 4 and 7, respectively.

With respect to claims 3, 6-10, 13, 16, 19 and 22, the Abe reference does not make up for the deficiencies of Wynn and Riley. The Abe reference discloses a data service system over cable which includes a DHCP client. Abe discloses a dual network interface cable modem which receives data from a cable operator via a first interface and transmits data to an host system via a second interface. (*Abe; FIG. 3.5*) Thus, the combination of Wynn, Riley, and Abe does not disclose, teach, or suggest a device which includes “*a single external network interface provided for interfacing with the external network, and allocated with a plurality of physical addresses* registered for physically

discriminating from other devices” or “*a processor that executes a receiving process and a transmitting process of data through the single external network interface.*”

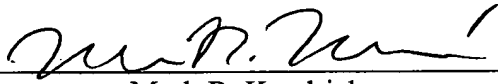
Accordingly, Applicants respectfully submits that claims 3, 6-10, 13, 16, 19 and 22 distinguish over Wynn in combination with Riley and Abe.

In view of the foregoing remarks, Applicants believe that the claims are in condition for allowance. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference call would advance prosecution of the application.

Respectfully submitted,

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